

FOREWORD	XX
CHAPTER ONE: MEDICAL DIAGNOSTICS KITS	1
INTRODUCTION	1
STUDY GOALS AND OBJECTIVES	1
REASONS FOR DOING THE STUDY.....	1
INTENDED AUDIENCE	2
SCOPE OF REPORT.....	2
INFORMATION SOURCES	3
ANALYST CREDENTIALS	4
RELATED REPORTS	4
BCC ONLINE SERVICES	4
DISCLAIMER.....	4
SUMMARY.....	5
REPORT HIGHLIGHTS	6
<i>TABLE 1 PROJECTED U.S. MDK MARKET BY END-USE SEGMENT,</i> <i>THROUGH 2013 (\$ MILLIONS).....</i>	<i>7</i>
<i>FIGURE 1 PROJECTED U.S. MDK MARKET BY END-USE SEGMENT,</i> <i>2007–2013 (\$ MILLIONS)</i>	<i>8</i>
THE MDK INDUSTRY.....	8
WHAT ARE MDKS?.....	8
ADVANTAGES OF MDKS	9
USES FOR MDKS.....	10
Clinical Testing.....	10
Clinical Diagnostic Testing	10
Monitoring.....	10
Screening.....	11
Confirmatory Testing.....	11
Research.....	11
Home Use.....	11
Veterinary Diagnosis.....	11
MARKET SIZE	12
<i>TABLE 2 PROJECTED U.S. MDK MARKET COMPARED WITH THE</i> <i>TOTAL DIAGNOSTIC TESTING INDUSTRY, THROUGH 2013 (\$</i> <i>BILLIONS).....</i>	<i>12</i>
Relation to Total Testing Market	13
<i>FIGURE 2 MDK'S RELATIVE SHARE OF U.S. TESTING MARKET</i> <i>PROJECTED, THROUGH 2013 (\$ BILLIONS)</i>	<i>13</i>
ALTERNATIVE METHODS.....	13
<i>TABLE 3 ALTERNATIVE METHODS TO MDKS AND AREA OF</i> <i>PRIMARY USE</i>	<i>14</i>
Chemical Assay.....	14
Culture	14
Microscopy.....	15

Biological Assay	15
Chromatographic Separation	15
MDK APPLICATIONS.....	16
<i>TABLE 4 SELECTED MDK APPLICATIONS.....</i>	<i>16</i>
INDUSTRY STRUCTURE.....	17
Reagents.....	17
Device/Carrier.....	17
Packaging.....	17
Component Suppliers	18
<i>FIGURE 3 COMPONENTS OF AN MDK.....</i>	<i>18</i>
<i>TABLE 5 SELECTED LISTING OF MDK COMPONENT SUPPLIERS</i>	
<i>BY AREA OF PARTICIPATION</i>	<i>19</i>
END MARKETS	19
<i>TABLE 6 MDK APPLICATIONS BY END-USE FACILITY</i>	<i>20</i>
Clinical Testing Facilities	20
<i>TABLE 7 U.S. CLINICAL TESTING FACILITIES WITH POTENTIAL</i>	
<i>FOR USING MDKS: CLIA VS. NON-CLIA.....</i>	<i>21</i>
CLIA-Certified Laboratories	21
Non-CLIA Laboratories/Facilities	21
Research Laboratories	21
Home-Use Market	22
Veterinary Applications	22
<i>TABLE 8 SELECTED LISTING OF ANIMAL TESTING MDKS.....</i>	<i>23</i>
TRADE PRACTICES	23
Promotion.....	23
Pricing.....	24
Sales Tie-ins.....	24
CHAPTER TWO: THE MARKET FOR MINIMALLY INVASIVE MEDICAL	
DEVICES	25
INTRODUCTION	25
MINIMALLY INVASIVE SURGERY.....	25
Minimally Invasive vs. Ambulatory Surgery	25
Minimally Invasive vs. Noninvasive Surgery	26
STUDY BACKGROUND.....	26
STUDY GOALS AND OBJECTIVES	27
INTENDED AUDIENCE	28
SCOPE OF REPORT.....	28
METHODOLOGY AND INFORMATION SOURCES.....	29
ANALYST CREDENTIALS	29
RELATED BCC RESEARCH STUDIES.....	30
SUMMARY	30
<i>TABLE 9 GLOBAL MARKET FOR MIS DEVICES AND EQUIPMENT,</i>	
<i>THROUGH 2014 (\$ BILLIONS).....</i>	<i>31</i>

<i>FIGURE 4 GLOBAL MARKET FOR MIS DEVICES AND EQUIPMENT, 2007–2014 (\$ BILLIONS)</i>	31
GEOGRAPHIC SEGMENTS	32
<i>TABLE 10 MARKET FOR MIS DEVICES AND EQUIPMENT SALES BY REGION, THROUGH 2014 (\$ MILLIONS)</i>	32
<i>FIGURE 5 MAJOR MIS GEOGRAPHIC SEGMENTS, 2007 VS. 2014 (% OF TOTAL SALES)</i>	33
END-USER SEGMENTS.....	33
<i>TABLE 11 U.S. MARKETS FOR MIS DEVICES AND EQUIPMENT SALES BY END-USER TYPE, THROUGH 2014 (\$ MILLIONS)</i>	34
<i>FIGURE 6 MAJOR U.S. MIS END-USER SEGMENTS, 2007 VS 2014 (% OF TOTAL SALES)</i>	35

CHAPTER THREE: CANCER THERAPIES: TECHNOLOGIES AND

GLOBAL MARKETS.....	36
INTRODUCTION	36
STUDY OBJECTIVES	36
REASONS FOR DOING THIS STUDY	36
CONTRIBUTIONS OF THE STUDY AND FOR WHOM	37
SCOPE OF THE STUDY	37
METHODOLOGY.....	37
INFORMATION SOURCES	37
ABOUT THE AUTHOR	37
RELATED BCC REPORTS.....	38
SUMMARY	38
<i>TABLE 12 THE GLOBAL CANCER THERAPY MARKET, THROUGH 2013 (\$ MILLIONS)</i>	38
<i>FIGURE 7 THE GLOBAL CANCER THERAPY MARKET, 2006–2013 (\$ MILLIONS)</i>	39
REGULATORY ISSUES.....	40
NEW DRUG APPROVALS	40
<i>TABLE 13 CANCER DRUGS APPROVED BY THE FDA</i>	40
<i>TABLE 13 (CONTINUED)</i>	41
<i>TABLE 13 (CONTINUED)</i>	42
<i>TABLE 13 (CONTINUED)</i>	43
<i>TABLE 13 (CONTINUED)</i>	44
<i>TABLE 13 (CONTINUED)</i>	45
<i>TABLE 13 (CONTINUED)</i>	46
<i>TABLE 13 (CONTINUED)</i>	47
NEW DRUG APPLICATIONS.....	47
<i>TABLE 14 NEW DRUG APPLICATIONS (2005 TO JANUARY 2008)</i>	47
<i>TABLE 14 (CONTINUED)</i>	48
RECALLS	48
<i>TABLE 15 RECALLS (2005 TO JANUARY 2008)</i>	49
<i>TABLE 15 (CONTINUED)</i>	50

<i>TABLE 15 (CONTINUED)</i>	51
CHAPTER FOUR: THE DENTAL MARKET: TECHNIQUES, EQUIPMENT, AND MATERIALS	52
INTRODUCTION	52
STUDY GOALS AND OBJECTIVES	52
REASONS FOR DOING THE STUDY.....	52
SCOPE OF REPORT.....	52
METHODOLOGY.....	53
RELATED BCC STUDIES	53
ANALYST CREDENTIALS	53
SUMMARY.....	54
THE DENTAL MARKET: MAJOR MARKETS SUMMARY	54
<i>TABLE 16 TOTAL U.S. DENTAL MARKET ANALYSIS BY PRODUCT SEGMENT, THROUGH 2013 (\$ MILLIONS)</i>	55
<i>FIGURE 8 TOTAL U.S. DENTAL MARKET ANALYSIS BY PRODUCT SEGMENT, 2006–2013 (\$ MILLIONS)</i>	55
INDUSTRY OVERVIEW	56
STRUCTURE AND HISTORY OF THE DENTAL INDUSTRY	56
Structure and History of ... (Continued)	57
Structure and History of ... (Continued)	58
DESCRIPTIONS AND STATISTICS OF DENTAL PRACTICES	59
Endodontics.....	59
Orthodontics	60
Periodontics.....	60
Prosthodontics	61
Dental Offices	61
<i>TABLE 17 DENTAL PROFESSIONALS BY YEAR, 1990–2005 (NUMBER)</i>	62
Dental Laboratories.....	62
TECHNOLOGY	62
FUTURE OF DENTISTRY	62
DIGITAL INTRAORAL CAMERAS	63
REMINERALIZING AGENTS, FLUORIDE, AND BLEACHING PRODUCTS.....	64
PRACTICE MANAGEMENT SOFTWARE	64
DIGITAL AND 3D DIGITAL RADIOGRAPHY	64
SNAP-ON SMILE.....	65
LIGHT-ACTIVATED WHITENING SYSTEMS	66
AIR ABRASION	66
MINIMALLY INVASIVE TECHNIQUES	67
LASER CARIES DETECTION.....	67
COMPUTER-AIDED DRAFTING/COMPUTER AIDED MANUFACTURING (CAD/CAM)	67
PROFESSIONAL DENTAL EQUIPMENT AND SUPPLIES	68

OVERVIEW	68
DENTAL EQUIPMENT	68
Overview	68
Product Description	68
Dental Furniture.....	68
Operatory Units	69
<i>TABLE 18 SELECTED MANUFACTURER AND DISTRIBUTOR LIST FOR GENERAL DENTAL FURNITURE.....</i>	<i>69</i>
Cavity Preparation Systems and Air Abrasion Units.....	69
Dental Lasers	70
• Diode Laser	70
• CO ₂ Laser	71
• Erbium Laser	71
<i>TABLE 19 SELECTED LIST OF DENTAL LASER MANUFACTURERS AND SUPPLIERS.....</i>	<i>71</i>
Sterilizers and Autoclaves	72
<i>TABLE 20 SELECTED DENTAL STERILIZER AND AUTOCLAVE SUPPLIERS.....</i>	<i>72</i>
Amalgamators and Mixers	72
<i>TABLE 21 SELECTED MANUFACTURERS AND DISTRIBUTORS OF AMALGAMATORS AND MIXERS</i>	<i>73</i>
X-ray Devices and Related Equipment	73
• Digital Dental X-Ray Systems.....	73
• Film Processors.....	74
<i>TABLE 22 SELECTED MANUFACTURERS AND DISTRIBUTORS OF DENTAL X-RAY DEVICES AND EQUIPMENT.....</i>	<i>75</i>
Other Types of Dental Equipment	75
• Intraoral Cameras.....	75
<i>TABLE 23 SELECTED MANUFACTURERS AND DISTRIBUTORS OF INTRAORAL CAMERAS.....</i>	<i>76</i>
• Air Compressors and Vacuum Systems	76
<i>TABLE 24 SELECTED MANUFACTURERS AND DISTRIBUTORS OF AIR COMPRESSORS AND VACUUM SYSTEMS.....</i>	<i>76</i>
Nitrous Oxide Systems	77
<i>TABLE 25 SELECTED MANUFACTURERS AND DISTRIBUTORS OF NITROUS OXIDE SYSTEMS.....</i>	<i>77</i>
• Ultrasonic Cleaners.....	77
<i>TABLE 26 SELECTED MANUFACTURERS AND DISTRIBUTORS OF ULTRASONIC CLEANERS.....</i>	<i>77</i>
• Scalers	78
<i>TABLE 27 SELECTED MANUFACTURERS AND DISTRIBUTORS OF DENTAL SCALERS</i>	<i>78</i>
• Curing Lights.....	78

<i>TABLE 28 SELECTED MANUFACTURERS AND DISTRIBUTORS OF CURING LIGHTS</i>	78
• Laboratory Equipment.....	79
<i>TABLE 29 SELECTED MANUFACTURERS AND DISTRIBUTORS OF LABORATORY EQUIPMENT</i>	79
MARKET ANALYSIS	79
<i>TABLE 30 MARKET FOR DENTAL EQUIPMENT BY PRODUCT SEGMENT, THROUGH 2013 (\$ MILLIONS)</i>	80
<i>FIGURE 9 MARKET FOR DENTAL EQUIPMENT BY PRODUCT SEGMENT, 2006–2013 (\$ MILLIONS)</i>	80

CHAPTER FIVE: ORGAN AND TISSUE TRANSPLANTATION AND ALTERNATIVES	81
INTRODUCTION	81
STUDY GOAL AND OBJECTIVES	81
REASONS FOR DOING THE STUDY.....	81
INTENDED AUDIENCE.....	82
SCOPE OF REPORT.....	82
METHODOLOGY.....	82
INFORMATION SOURCES	83
AUTHOR’S CREDENTIALS	83
RELATED BCC PUBLICATIONS	83
SUMMARY.....	83
SUMMARY (CONTINUED)	84
<i>TABLE 31 U.S. MARKET FOR SOLID ORGAN AND TISSUE TRANSPLANTATION, THROUGH 2013 (\$ MILLIONS)</i>	85
<i>FIGURE 10 U.S. MARKET FOR SOLID ORGAN AND TISSUE TRANSPLANTATION, 2007–2013 (\$ MILLIONS)</i>	85
INDUSTRY OVERVIEW	85
INDUSTRY OVERVIEW (CONTINUED).....	86
HISTORY OF TRANSPLANTATION.....	87
TISSUE TYPING	87
IMMUNOSUPPRESSION	87
Newer Immunosuppressive Drugs.....	88
PRESERVATION	89
GOVERNMENT REIMBURSEMENT	90
THE TRANSPLANTATION PROCESS.....	90
PREPARATION	90
SURGERY	91
RECUPERATION	91
MAINTENANCE.....	92
IMPORTANCE OF THE INDUSTRY	92
ORGANS	92

<i>TABLE 32 U.S. ORGAN TRANSPLANTS: AVERAGE FIRST YEAR COST, NUMBER OF PROCEDURES AND VALUE BY TYPE OF ORGAN TRANSPLANT, THROUGH 2013 (\$ MILLIONS)</i>	93
KIDNEY.....	93
<i>TABLE 33 LEADING U.S. KIDNEY TRANSPLANT PROGRAMS BY TOTAL NUMBER OF PROCEDURES PERFORMED IN 2007</i>	94
LIVER	94
<i>TABLE 34 TOP FIVE U.S. LIVER TRANSPLANT PROGRAMS BY TOTAL PROCEDURES PERFORMED IN 2007</i>	95
HEART.....	95
<i>TABLE 35 TOP FIVE U.S. HEART TRANSPLANT PROGRAMS BY TOTAL PROCEDURES PERFORMED IN 2007</i>	96
LUNG.....	96
<i>TABLE 36 TOP FIVE U.S. LUNG TRANSPLANT PROGRAMS BY TOTAL PROCEDURES PERFORMED IN 2007</i>	96
INTESTINE.....	97
<i>TABLE 37 TOP FIVE U.S. INTESTINE/SMALL BOWEL TRANSPLANT PROGRAMS BY TOTAL PROCEDURES PERFORMED IN 2007</i>	97
PANCREAS	97
<i>TABLE 38 TOP FIVE U.S. PANCREAS TRANSPLANT PROGRAMS BY TOTAL PROCEDURES PERFORMED IN 2007</i>	98
TISSUES	98
DRIVERS IN THE MARKET	99
<i>TABLE 39 TISSUE GRAFTING IN THE U.S. BY TISSUE TYPE, THROUGH 2013 (MILLION PROCEDURES)</i>	99
<i>FIGURE 11 U.S. MARKET FOR TISSUE GRAFTING PROCEDURES BY TYPE, 2007–2013 (MILLION PROCEDURES)</i>	100
CORNEA.....	100
BLOOD STEM CELLS.....	101
BONE ALLOGRAFTS.....	101
HEART VALVES.....	101
VASCULAR TISSUE	102
SKIN AND COLLAGEN.....	102
Applications	102
WAITING LISTS OUTPACE DONATIONS.....	103
<i>TABLE 40 PATIENTS ON U.S. WAITING LISTS AT THE END OF THE YEAR BY TYPE OF ORGAN TRANSPLANT, 2003–2006</i>	103
<i>TABLE 40 (CONTINUED)</i>	104
TRENDS IN U.S. LIVING AND CADAVERIC DONATIONS	104
<i>TABLE 41 TRENDS IN U.S. LIVING AND CADAVERIC DONATIONS, THROUGH 2013</i>	105
TRENDS IN TRANSPLANTATION OF ALL ORGANS.....	105
<i>TABLE 42 U.S. ORGAN TRANSPLANTS, THROUGH 2006 (NUMBER OF PROCEDURES)</i>	105

INTERNATIONAL TRENDS	106
<i>TABLE 43 NUMBERS OF DONATED CADAVERS BY REGION, 2003–2006</i>	106
LIMITED SUPPLY CURTAILS TRANSPLANTATIONS.....	106
Living Donor Programs	107
KEY FACTORS IN INDUSTRY GROWTH	107
Reducing Demand.....	107
Patient Survival Rates	108
<i>TABLE 44 ONE-YEAR AND FIVE-YEAR PATIENT SURVIVAL RATES, BY ORGAN FOR TRANSPLANTS PERFORMED, 1997–2004 (%)</i>	108
<i>TABLE 45 ONE-YEAR AND FIVE-YEAR GRAFT SURVIVAL RATES, BY ORGAN FOR TRANSPLANTS PERFORMED, 1997–2004 (%)</i>	108
<i>TABLE 46 NUMBER OF PEOPLE IN THE U.S. LIVING WITH A FUNCTIONING TRANSPLANT BY TYPE, 2000–2005*</i>	109
Organ Substitutes.....	109
Organs from Animals: Xenotransplantation	109
Organ Primordia	110
Nuclear Transfer to Eliminate the Rejection Gene	110
Porcine Endogenous Retrovirus	111
ARTIFICIAL ORGANS	111
CELLULAR TRANSPLANTS.....	112
ORGAN REJECTION STRATEGIES	112
KEY FACTORS INHIBITING GROWTH.....	113
LACK OF DONORS	113
ALTERNATIVE THERAPIES.....	113
CULTURAL STIGMAS.....	113
 CHAPTER SIX: DISABLED AND ELDERLY ASSISTIVE TECHNOLOGIES IN THE U.S.	 114
INTRODUCTION	114
ASSISTIVE TECHNOLOGY PRODUCTS.....	114
STUDY BACKGROUND.....	114
STUDY GOALS AND OBJECTIVES	115
INTENDED AUDIENCE.....	115
SCOPE OF REPORT.....	116
METHODOLOGY AND INFORMATION SOURCES.....	117
ANALYST CREDENTIALS	117
RELATED BCC RESEARCH REPORTS.....	117
SUMMARY.....	118
<i>TABLE 47 PROJECTED U.S. ASSISTIVE TECHNOLOGY SALES, THROUGH 2013 (\$ MILLIONS)</i>	118
<i>FIGURE 12 PROJECTED U.S. ASSISTIVE TECHNOLOGY SALES, 2007–2013 (\$ MILLIONS)</i>	119
INDUSTRY STRUCTURE AND COMPETITION	119
NUMBER AND SIZE OF FIRMS	119

MARKET SHARES	120
Mobility Aids.....	120
<i>FIGURE 13 MOBILITY AIDS MARKET LEADERS, 2007 (%)</i>	121
Access Aids.....	121
<i>FIGURE 14 ACCESS AIDS MARKET LEADERS, 2007 (%)</i>	122
Beds, Seating Systems, and Ergonomic Aids	122
<i>FIGURE 15 BEDS, SEATING SYSTEMS, AND ERGONOMETRIC AIDS</i>	
<i>MARKET LEADERS, 2007 (%)</i>	123
Daily Living Aids.....	123
<i>FIGURE 16 DAILY LIVING AIDS MARKET LEADERS, 2007 (%)</i>	124
Communication Aids	124
<i>FIGURE 17 COMMUNICATION AIDS MARKET LEADERS, 2007 (%)</i>	125
Computer Access Aids	125
<i>FIGURE 18 COMPUTER ACCESS AIDS MARKET LEADERS, 2007 (%)</i>	126
Vision and Reading Aids	127
<i>FIGURE 19 VISION AND READING AIDS MARKET LEADERS, 2007</i>	127
<i>FIGURE 19 (CONTINUED)</i>	128
Environmental Aids.....	128
Medical/Personal Monitoring Aids.....	128
<i>FIGURE 20 MEDICAL/PERSONAL MONITORING AIDS MARKET</i>	
<i>LEADERS, 2007 (%)</i>	129
CHAPTER SEVEN: MEDICAL DEVICE COATINGS	130
INTRODUCTION	130
STUDY GOAL AND OBJECTIVES	130
REASONS FOR DOING THE STUDY.....	130
INTENDED AUDIENCE.....	131
SCOPE OF REPORT.....	131
TWENTY-TWO MEDICAL SPECIALTIES.....	132
Twenty-two Medical Specialties (Continued).....	133
METHODOLOGY.....	134
INFORMATION SOURCES	134
ANALYST'S CREDENTIALS.....	135
RELATED BCC WORK CREDENTIALS	135
SUMMARY.....	135
<i>TABLE 48 GLOBAL MEDICAL DEVICE COATING MARKET BY</i>	
<i>REGION, THROUGH 2014 (\$ MILLIONS)</i>	136
<i>FIGURE 21 GLOBAL MEDICAL DEVICE COATING MARKET BY</i>	
<i>REGION, 2009 AND 2014 (\$ MILLIONS)</i>	137
CHAPTER EIGHT: PEDIATRIC HEALTH CARE PRODUCTS AND	
SERVICES	138
INTRODUCTION	138
STUDY GOAL AND OBJECTIVES	138
REASONS FOR DOING THE STUDY.....	138

INTENDED AUDIENCE	139
SCOPE OF REPORT	139
INFORMATION SOURCES	139
ANALYST'S CREDENTIALS	140
RELATED BCC PUBLICATIONS	140
SUMMARY	140
PROJECTED GROWTH OF PEDIATRIC MARKETS.....	141
<i>TABLE 49 GLOBAL TRENDS IN PEDIATRIC HEALTH CARE,</i>	
<i>THROUGH 2013 (\$ MILLIONS).....</i>	<i>141</i>
<i>FIGURE 22 GLOBAL TRENDS IN PEDIATRIC HEALTH CARE BASED</i>	
<i>ON CONDITION, 2007–2013 (\$ MILLIONS).....</i>	<i>141</i>
MARKET FORECASTS FOR SHORT-TERM ILLNESSES	142
Rotavirus.....	142
Ear Infections	142
Upper Respiratory Infections.....	142
MARKET FORECASTS FOR CHRONIC ILLNESSES	142
Allergies	143
Attention Deficit Disorders	143
Asthma	143
Autism Spectrum Disorders.....	144
Diabetes	144
Obesity	144
OVERVIEW OF THE PEDIATRIC HEALTHCARE INDUSTRY	145
<i>TABLE 50 PROJECTED PEDIATRIC PREVENTATIVE CARE COSTS</i>	
<i>FROM BIRTH THROUGH AGE 18 IN THE U.S., THROUGH 2013 (\$</i>	
<i>MILLIONS).....</i>	<i>145</i>
PRENATAL CARE/IMPLICATIONS	145
International Prenatal Care/Implications.....	146
Low Birth Weight.....	146
NEWBORN CARE.....	147
Care in the U.S.	147
International Newborn Care.....	147
Malnutrition.....	148
CHILDREN AGE 1 TO 6	148
CHILDREN AGE 7 TO 12	149
ADOLESCENT CHILDREN AGE 13 TO 18.....	149
ADOLESCENT REPRODUCTIVE HEALTH	150
Sexually Transmitted Diseases.....	150
Human Papillomavirus (HPV)	150
VACCINES/IMMUNIZATIONS	151
<i>TABLE 51 IMMUNIZATION SCHEDULE FOR CHILDREN FROM</i>	
<i>BIRTH TO 6 MONTHS</i>	<i>151</i>
<i>TABLE 52 IMMUNIZATION SCHEDULE FOR CHILDREN FROM 12</i>	
<i>MONTHS TO 4 TO 6 YEARS.....</i>	<i>152</i>

<i>TABLE 53 IMMUNIZATION SCHEDULE FOR CHILDREN AND ADOLESCENTS FROM 7 TO 18</i>	152
<i>TABLE 53 (CONTINUED)</i>	153
Vaccine Efficacy and Controversy.....	153
IMPLICATIONS FOR FUTURE DEVELOPMENTS IN THE U.S.	153
SHORT-TERM ILLNESSES IN THE PEDIATRIC POPULATION	154
<i>TABLE 54 GLOBAL COSTS OF THREE PRIMARY SHORT-TERM ILLNESSES IN PEDIATRIC POPULATION, THROUGH 2013 (\$ MILLIONS)</i>	155
<i>FIGURE 23 GLOBAL COST OF PEDIATRIC SHORT-TERM ILLNESS, 2008 AND 2013 (\$ MILLIONS)</i>	155
OTITIS MEDIA (EAR INFECTIONS)	156
Causes of Otitis Media	156
Allergies.....	156
Infection.....	156
Blockage	157
Nutrition and Breastfeeding	157
Types and Symptoms.....	157
Treatment	158
Pharmacological Intervention	158
• Use of Prevnar	158
<i>TABLE 55 GLOBAL PRESCRIPTION COSTS FOR TREATMENT OF PEDIATRIC OTITIS MEDIA, THROUGH 2013 (\$ MILLIONS)</i>	159
<i>TABLE 56 PRESCRIPTION COSTS FOR TREATMENT OF PEDIATRIC OTITIS MEDIA, IN THE U.S., THROUGH 2013 (\$ MILLIONS)</i>	159
Surgical Intervention.....	160
• Myringotomy.....	160
<i>TABLE 57 GLOBAL SURGICAL COSTS FOR MYRINGOTOMY IN PEDIATRIC PATIENTS, THROUGH 2013 (\$ MILLIONS)</i>	160
<i>TABLE 58 SURGICAL COSTS FOR MYRINGOTOMY IN U.S. PEDIATRIC PATIENTS, THROUGH 2013 (\$ MILLIONS)</i>	161
• Adenoidectomy and Tonsillectomy	161
Adenoidectomy ... (Continued).....	162
<i>TABLE 59 GLOBAL SURGICAL COSTS FOR TONSILLECTOMY/ADENOIDECTOMY IN PEDIATRIC PATIENTS, THROUGH 2013 (\$ MILLIONS)</i>	163
<i>TABLE 60 SURGICAL COSTS FOR TONSILLECTOMY/ADENOIDECTOMY IN U.S. PEDIATRIC PATIENTS, THROUGH 2013 (\$ MILLIONS)</i>	163
GASTROINTESTINAL ILLNESSES	163
Rotavirus.....	164
Transmission.....	164
Symptoms.....	164

Treatment.....	164
• Dehydration	165
• Zinc.....	165
Vaccinations	165
• Rotateq.....	166
• Rotarix.....	166
<i>TABLE 61 GLOBAL VACCINATION FOR PEDIATRIC ROTOVIRUS, THROUGH 2013 (\$ MILLIONS).....</i>	<i>166</i>
<i>TABLE 62 U.S. VACCINATION FOR PEDIATRIC ROTOVIRUS, THROUGH 2013 (\$ MILLIONS).....</i>	<i>166</i>
Gastroesophageal Reflux.....	167
Treatment.....	167
• Eliminate Symptoms.....	167
• Heal Esophagus.....	168
• Prevent Complications	168
<i>TABLE 63 CURRENT TREATMENTS FOR GERD.....</i>	<i>168</i>
UPPER RESPIRATORY INFECTIONS	169
<i>TABLE 64 GLOBAL DIRECT COSTS OF PEDIATRIC UPPER RESPIRATORY INFECTIONS, THROUGH 2013 (\$ MILLIONS).....</i>	<i>169</i>
<i>TABLE 65 DIRECT COSTS FOR PEDIATRIC UPPER RESPIRATORY INFECTIONS IN THE U.S, THROUGH 2013 (\$ MILLIONS).....</i>	<i>170</i>
Causes and Symptoms.....	170
<i>TABLE 66 COMMON SYMPTOMS OF AN URI</i>	<i>171</i>
Treatments.....	171
Increased Fluid Intake	171
Second-Hand Smoke	172
Medications	172
Antibiotic Treatments	172
Withdrawing Medicines.....	173
Complications	174